****CS445 - Lab 1 Collaborative Git****

1. Github Setup – create a github repository for daily lab // done
2. What you need to submit for this lab
   1. Create a .md file for Lab1 //done
   2. Inside the .md file includes all screenshots when you practice the commands below // using words file instead.
3. Markdown study: [https://guides.github.com/features/mastering-markdown/](https://guides.github.com/features/mastering-markdown/" \t "/Users/queena/Documents\\x/_blank)
4. Markdown for images: [https://www.markdownguide.org/basic-syntax/#images-1](https://www.markdownguide.org/basic-syntax/" \l "images-1" \t "/Users/queena/Documents\\x/_blank)

****[4 points] Exercise 1: Practice with all the local repository commands from the slides:****

1. git init:

Queenas-MacBook-Pro:lab1 queena$ git init

hint: Using 'master' as the name for the initial branch. This default branch name

hint: is subject to change. To configure the initial branch name to use in all

hint: of your new repositories, which will suppress this warning, call:

hint:

hint: git config --global init.defaultBranch <name>

hint:

hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and

hint: 'development'. The just-created branch can be renamed via this command:

hint:

hint: git branch -m <name>

Initialized empty Git repository in /Users/queena/Documents/GitHub/AwarenessNaha.github.io/cs445/lab1/.git/

1. git status

Queenas-MacBook-Pro:lab1 queena$ git status

On branch master

No commits yet

Untracked files:

(use "git add <file>..." to include in what will be committed)

lab1.js

nothing added to commit but untracked files present (use "git add" to track)

1. git diff
2. git add

Queenas-MacBook-Pro:lab1 queena$ git add CS445Lab1.docx

Queenas-MacBook-Pro:lab1 queena$ git status

On branch master

No commits yet

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: CS445Lab1.docx

Untracked files:

(use "git add <file>..." to include in what will be committed)

lab1.js

Queenas-MacBook-Pro:lab1 queena$ git add lab1,js

fatal: pathspec 'lab1,js' did not match any files

Queenas-MacBook-Pro:lab1 queena$ git status

On branch master

No commits yet

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: CS445Lab1.docx

Untracked files:

(use "git add <file>..." to include in what will be committed)

lab1.js

Queenas-MacBook-Pro:lab1 queena$ git add lab1.js

Queenas-MacBook-Pro:lab1 queena$ git status

On branch master

No commits yet

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: CS445Lab1.docx

new file: lab1.js

1. git commit

Queenas-MacBook-Pro:lab1 queena$ git commit -m "Naha's new files"

[master (root-commit) 79d053c] Naha's new files

Committer: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

Your name and email address were configured automatically based

on your username and hostname. Please check that they are accurate.

You can suppress this message by setting them explicitly:

git config --global user.name "Your Name"

git config --global user.email you@example.com

After doing this, you may fix the identity used for this commit with:

git commit --amend --reset-author

2 files changed, 4 insertions(+)

create mode 100644 CS445Lab1.docx

create mode 100644 lab1.js

1. git commit –amend (updating the last commit)

Queenas-MacBook-Pro:lab1 queena$ git commit --amend -m "an updated commit message"

[MIUCS fbb0a0d] an updated commit message

Date: Tue May 18 14:03:15 2021 -0500

Committer: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

Your name and email address were configured automatically based

on your username and hostname. Please check that they are accurate.

You can suppress this message by setting them explicitly:

git config --global user.name "Your Name"

git config --global user.email you@example.com

After doing this, you may fix the identity used for this commit with:

git commit --amend --reset-author

2 files changed, 4 insertions(+)

create mode 100644 CS445Lab1.docx

create mode 100644 lab1.js

1. git log

Queenas-MacBook-Pro:lab1 queena$ git log

commit fbb0a0dc40e68348edd4c0e7e81bf0f690e6e46c (HEAD -> MIUCS)

Author: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

Date: Tue May 18 14:03:15 2021 -0500

an updated commit message

1. git show

Queenas-MacBook-Pro:lab1 queena$ git show

commit fbb0a0dc40e68348edd4c0e7e81bf0f690e6e46c (HEAD -> MIUCS)

Author: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

Date: Tue May 18 14:03:15 2021 -0500

an updated commit message

diff --git a/CS445Lab1.docx b/CS445Lab1.docx

new file mode 100644

index 0000000..c946998

Binary files /dev/null and b/CS445Lab1.docx differ

diff --git a/lab1.js b/lab1.js

new file mode 100644

index 0000000..a8e62bc

:

1. git tag

Queenas-MacBook-Pro:cs445 queena$ git tag -a Ala#3 -m "Amen"

Queenas-MacBook-Pro:cs445 queena$ git tag

Ala#3

1. git restore

Queenas-MacBook-Pro:lab1 queena$ git restore .

Queenas-MacBook-Pro:cs445 queena$ git restore .

error: pathspec '.' did not match any file(s) known to git

1. git branch

Queenas-MacBook-Pro:cs445 queena$ git branch

\* main

Queenas-MacBook-Pro:cs445 queena$ git branch MahaNaha

Queenas-MacBook-Pro:cs445 queena$ git branch

MahaNaha

\* main

1. git checkout

Queenas-MacBook-Pro:cs445 queena$ git checkout MahaNaha

Switched to branch 'MahaNaha'

1. git merge

Queenas-MacBook-Pro:cs445 queena$ git merge main

Already up to date.

1. Create a conflict and solve the conflict
2. Undo changes from a certain commit git revert

Queenas-MacBook-Pro:cs445 queena$ git revert HEAD~3

CONFLICT (modify/delete): cs303/labW2D3/recursionTests.js deleted in parent of 8a8ed7b (W2D3HW) and modified in HEAD. Version HEAD of cs303/labW2D3/recursionTests.js left in tree.

CONFLICT (modify/delete): cs303/labW2D3/recursion.js deleted in parent of 8a8ed7b (W2D3HW) and modified in HEAD. Version HEAD of cs303/labW2D3/recursion.js left in tree.

Removing cs303/labW2D3/myreduce.js

Removing cs303/labW2D3/inClassEx.js

error: could not revert 8a8ed7b... W2D3HW

hint: after resolving the conflicts, mark the corrected paths

hint: with 'git add <paths>' or 'git rm <paths>'

hint: and commit the result with 'git commit'

1. Erase commits with git reset

Queenas-MacBook-Pro:cs445 queena$ git reset

Unstaged changes after reset:

M cs303/labW2D2/nahaVersionOfHigherOrderFun.js

M cs303/labW2D2/nahaVersionOfHigherOrderFunTest.js

D cs303/labW2D3/inClassEx.js

D cs303/labW2D3/myreduce.js

Other practice as below.

Queenas-MacBook-Pro:lab1 queena$ git init

Reinitialized existing Git repository in /Users/queena/Documents/GitHub/AwarenessNaha.github.io/cs445/lab1/.git/

Queenas-MacBook-Pro:lab1 queena$ git status

On branch master

No commits yet

Untracked files:

(use "git add <file>..." to include in what will be committed)

CS445 Lab 1.docx

lab1.js

Queenas-MacBook-Pro:lab1 queena$ git add CS445Lab1.docx

Queenas-MacBook-Pro:lab1 queena$ git status

On branch master

No commits yet

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: CS445Lab1.docx

Untracked files:

(use "git add <file>..." to include in what will be committed)

lab1.js

Queenas-MacBook-Pro:lab1 queena$ git add lab1,js

fatal: pathspec 'lab1,js' did not match any files

Queenas-MacBook-Pro:lab1 queena$ git status

On branch master

No commits yet

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: CS445Lab1.docx

Untracked files:

(use "git add <file>..." to include in what will be committed)

lab1.js

Queenas-MacBook-Pro:lab1 queena$ git add lab1.js

Queenas-MacBook-Pro:lab1 queena$ git status

On branch master

No commits yet

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: CS445Lab1.docx

new file: lab1.js

Queenas-MacBook-Pro:lab1 queena$ git diff

Queenas-MacBook-Pro:lab1 queena$ got commit m"Naha committing"

bash: got: command not found

Queenas-MacBook-Pro:lab1 queena$ git commit m "Naha committing"

error: pathspec 'm' did not match any file(s) known to git

error: pathspec 'Naha committing' did not match any file(s) known to git

Queenas-MacBook-Pro:lab1 queena$ git commit -m "Naha's new files"

[master (root-commit) 79d053c] Naha's new files

Committer: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

Your name and email address were configured automatically based

on your username and hostname. Please check that they are accurate.

You can suppress this message by setting them explicitly:

git config --global user.name "Your Name"

git config --global user.email you@example.com

After doing this, you may fix the identity used for this commit with:

git commit --amend --reset-author

2 files changed, 4 insertions(+)

create mode 100644 CS445Lab1.docx

create mode 100644 lab1.js

Queenas-MacBook-Pro:lab1 queena$ git log

commit 79d053c2570aa4810dbb3dd751de4738d1f1b8e7 (HEAD -> master)

Author: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

Date: Tue May 18 14:03:15 2021 -0500

Naha's new files

Queenas-MacBook-Pro:lab1 queena$ git show

commit 79d053c2570aa4810dbb3dd751de4738d1f1b8e7 (HEAD -> master)

Author: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

commit 79d053c2570aa4810dbb3dd751de4738d1f1b8e7 (HEAD -> master)

Author: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

Date: Tue May 18 14:03:15 2021 -0500

Naha's new files

diff --git a/CS445Lab1.docx b/CS445Lab1.docx

new file mode 100644

index 0000000..c946998

Binary files /dev/null and b/CS445Lab1.docx differ

diff --git a/lab1.js b/lab1.js

new file mode 100644

index 0000000..a8e62bc

Queenas-MacBook-Pro:lab1 queena$ git tag

Queenas-MacBook-Pro:lab1 queena$ git tag -a Ala -m "love"

Queenas-MacBook-Pro:lab1 queena$ git tag

Ala

Queenas-MacBook-Pro:lab1 queena$ git restore

fatal: you must specify path(s) to restore

Queenas-MacBook-Pro:lab1 queena$ git restore .

Queenas-MacBook-Pro:lab1 queena$ git branch

\* master

Queenas-MacBook-Pro:lab1 queena$ git branch MIUCS

Queenas-MacBook-Pro:lab1 queena$ git branch

MIUCS

\* master

Queenas-MacBook-Pro:lab1 queena$ git checkout

Queenas-MacBook-Pro:lab1 queena$ git checkout MIUCS

Switched to branch 'MIUCS'

Queenas-MacBook-Pro:lab1 queena$ git merge master

Already up to date.

Queenas-MacBook-Pro:lab1 queena$ git revert

usage: git revert [<options>] <commit-ish>...

or: git revert <subcommand>

--quit end revert or cherry-pick sequence

--continue resume revert or cherry-pick sequence

--abort cancel revert or cherry-pick sequence

--skip skip current commit and continue

--cleanup <mode> how to strip spaces and #comments from message

-n, --no-commit don't automatically commit

-e, --edit edit the commit message

-s, --signoff add a Signed-off-by trailer

-m, --mainline <parent-number>

select mainline parent

--rerere-autoupdate update the index with reused conflict resolution if possible

--strategy <strategy>

merge strategy

-X, --strategy-option <option>

option for merge strategy

-S, --gpg-sign[=<key-id>]

GPG sign commit

Queenas-MacBook-Pro:lab1 queena$ git revert merge

fatal: bad revision 'merge'

Queenas-MacBook-Pro:lab1 queena$ git reset

Queenas-MacBook-Pro:lab1 queena$ git status

On branch MIUCS

nothing to commit, working tree clean

Queenas-MacBook-Pro:lab1 queena$ git reset

Queenas-MacBook-Pro:lab1 queena$

****[2 points] Exercise 2:** **Practice with all the remote repository commands from the slides:****

1. Create a remote repository // done
2. Create README.md //done
3. Add at least 5 markdown syntax (For example: Headers, Bold, Code, Unordered List, Links) [Cheatsheet](https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet" \t "/Users/queena/Documents\\x/_blank)
4. git remote

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git remote

origin

1. git clone

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git clone https://github.com/AwarenessNaha/remoteRepositoryCS445.git

Cloning into 'remoteRepositoryCS445'...

remote: Enumerating objects: 3, done.

remote: Counting objects: 100% (3/3), done.

remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (3/3), done.

---------making change----------

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git add hello.js

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git add order.js

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git status

On branch main

Your branch is ahead of 'origin/main' by 1 commit.

(use "git push" to publish your local commits)

Changes to be committed:

(use "git restore --staged <file>..." to unstage)

new file: hello.js

new file: order.js

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git commit -m "commiting the change for pushing"

[main e818db7] commiting the change for pushing

Committer: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

Your name and email address were configured automatically based

on your username and hostname. Please check that they are accurate.

You can suppress this message by setting them explicitly:

git config --global user.name "Your Name"

git config --global user.email you@example.com

After doing this, you may fix the identity used for this commit with:

git commit --amend --reset-author

2 files changed, 5 insertions(+)

create mode 100644 hello.js

create mode 100644 order.js

------------ ready to push---------

1. git push

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git push origin main

Enumerating objects: 7, done.

Counting objects: 100% (7/7), done.

Delta compression using up to 4 threads

Compressing objects: 100% (5/5), done.

Writing objects: 100% (6/6), 757 bytes | 252.00 KiB/s, done.

Total 6 (delta 0), reused 0 (delta 0), pack-reused 0

To https://github.com/AwarenessNaha/remoteRepositoryCS445.git

cd14902..e818db7 main -> main

1. git fetch

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git fetch --all

Fetching origin

1. git pull

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git push origin --all

Total 0 (delta 0), reused 0 (delta 0), pack-reused 0

remote:

remote: Create a pull request for 'order' on GitHub by visiting:

remote: https://github.com/AwarenessNaha/remoteRepositoryCS445/pull/new/order

remote:

To https://github.com/AwarenessNaha/remoteRepositoryCS445.git

\* [new branch] order -> order

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git push origin --all

Total 0 (delta 0), reused 0 (delta 0), pack-reused 0

remote:

remote: Create a pull request for 'order' on GitHub by visiting:

remote: https://github.com/AwarenessNaha/remoteRepositoryCS445/pull/new/order

remote:

To https://github.com/AwarenessNaha/remoteRepositoryCS445.git

\* [new branch] order -> order

****[4 points] Exercise 3:** **Practice with all the third party repositories commands from the slides:****

Assume we are working with the following upstream: https://github.com/bellaxing/CS445-May2021-Lab1

1. Star the repository //done
2. Watch the repository for any changes //done
3. Fork the repository
4. Clone your forked repository into your local machine //done

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git clone https://github.com/AwarenessNaha/CS445-May2021-Lab1.git

Cloning into 'CS445-May2021-Lab1'...

remote: Enumerating objects: 21, done.

remote: Counting objects: 100% (21/21), done.

remote: Compressing objects: 100% (17/17), done.

remote: Total 21 (delta 3), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (21/21), 244.21 KiB | 1.39 MiB/s, done.

Resolving deltas: 100% (3/3), done.

1. Create a new topic branch named using studentId-studentName, For example: 610001-JohnSmith

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git branch 20210001-NahaShiva

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git branch

20210001-NahaShiva

\* main

Order

1. Checkout your new branch

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git checkout 20210001-NahaShiva

Switched to branch '20210001-NahaShiva'

1. Add a new file with your name, example: hello.js //add naha.js

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git add naha.js

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git status

On branch 20210001-NahaShiva

Changes to be committed:

(use "git restore --staged <file>..." to unstage)

new file: CS445-May2021-Lab1

new file: naha.js

1. Commit the changes

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git commit -m "changed after adding naha'js"

[20210001-NahaShiva 142600e] changed after adding naha'js

Committer: Queena SupremeBliss <queena@Queenas-MacBook-Pro.local>

Your name and email address were configured automatically based

on your username and hostname. Please check that they are accurate.

You can suppress this message by setting them explicitly:

git config --global user.name "Your Name"

git config --global user.email you@example.com

After doing this, you may fix the identity used for this commit with:

git commit --amend --reset-author

2 files changed, 2 insertions(+)

create mode 160000 CS445-May2021-Lab1

create mode 100644 naha.js

1. Merge your studentId-studentName branch with the main branch

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git branch

\* 20210001-NahaShiva

main

order

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git checkout main

warning: unable to rmdir 'CS445-May2021-Lab1': Directory not empty

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git merge 20210001-NahaShiva

Updating e818db7..142600e

Fast-forward

CS445-May2021-Lab1 | 1 +

naha.js | 1 +

2 files changed, 2 insertions(+)

create mode 160000 CS445-May2021-Lab1

create mode 100644 naha.js

1. Push your changes to the remote repo

Queenas-MacBook-Pro:remoteRepositoryCS445 queena$ git push origin

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 4 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 485 bytes | 242.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

To https://github.com/AwarenessNaha/remoteRepositoryCS445.git

e818db7..142600e main -> main

1. Create a new Pull Request to the upstream repo

It was created.

****What you need to submit:****

****1. Write a status about your homework, such as how much percentage you finish in this homework, etc****

****2. Copy and paste your github link for this Lab1****

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